

- “Require that new developments create a circulation plan – submit it as an element of the development application and depicting the following: pedestrian access and circulation, type of infrastructure (sidewalk vs. multiuse path), connections to adjacent pedestrian facilities, bicycle facilities, and transit, if applicable. (VDAP, p.26)
- “Include bicycle and pedestrian facilities to ensure that both are convenient options for traveling to and through the Village District. Pedestrian accommodations include sidewalks as well as benches and other seating areas.” (VDAP, p.27)
- “Extend greenway and multi-use connections beyond the core of the Village District, ensuring that they are well-integrated into the sidewalk network and are creating strong linkages to the core (see VDAP map for reference).” (VDAP, p.27)
- “Build sidewalks and close gaps along existing collector streets (Holly Springs Road, Raleigh Road, and Ballentine Street).” (VDAP, p.27)
- “Install sidewalks on Main Street from Third Street to Maple Avenue.” (VDAP, p.27)
- “Connect Lakeside community to existing Womble Park Greenway.” (VDAP, p.27)
- “Provide greenway connection between Avent Ferry Road and the Cultural Center.” (VDAP, p.27)
- “Provide pedestrian accommodations as a part of development and redevelopment along all roadways.” (VDAP, p.27)
- “Pedestrian facilities (sidewalk or multi-use path) shall be installed along both sides of all new streets as shown on the VDAP map.” (VDAP, p.27)
- “Pedestrian facilities (sidewalk or multi-use path) shall be installed along one side of existing cross-streets (east-



Figure 4(h):  
*There is a multitude of pedestrian friendly store-front design throughout the world and even locally. Shown here is Wilmington, NC.*

west).” (VDAP, p.27)

- “Pedestrian facilities (sidewalk or multiuse path) shall be installed along both sides of Raleigh Street, Main Street, and Avent Ferry Road within the Village District.” (VDAP, p.27)

#### Streets and Streetscapes:

- “A successful “Main Street” is well-designed, defined by a strong building edge, and enhanced by features that blend to create a unique, appealing streetscape. Equally important is turning Main Street into a pedestrian-oriented area while ensuring sufficient movement of vehicular traffic.” (VDAP, p.29)
- “Continue the process that will allow the Town to take over maintenance of Main Street from NCDOT. Without the need for approval from NCDOT, the Town can choose from a wider range of improvement options (such as crosswalk paving materials) and implementation time will be minimized.” (VDAP, p.29)
- “Lower the posted speed to 25 miles per hour along Main Street.” (VDAP, p.29)
- “Install crosswalks at intersections as well as at mid-block locations that, in addition to facilitating safe pedestrian movement, add variety to the streetscape.” (VDAP, p.29)
- “Improve the streetscapes with wider sidewalks, plantable verge, street trees, and buried utilities.” (VDAP, p.29)

#### Development Design/Form:

- “Encourage a compact form of development organized to create a continuous building edge. These edges along public streets and spaces define the public realm and give streets and spaces a scale that is more conducive to pedestrian activity.” (VDAP, p. 35)

As noted in Chapter Two, the implementation section of the VDAP recommends the incorporation of greenway and

sidewalk facilities that are identified in the VDAP into the “future pedestrian master plan”. The Holly Springs Pedestrian Transportation Plan incorporates said facilities and supports all VDAP pedestrian-related recommendations.

### Unified Development Ordinance (UDO)

Sections of the Town of Holly Springs UDO that most relate to pedestrian planning are summarized below.

Section 2.09 Development Options for Residential Districts - This Section provides developers with “options” to design and build residential communities that encourage, among other things, the development of pedestrian oriented communities. Part C.2.d.(4), Vehicular Design and Pedestrian Connectivity, recommends the following pedestrian circulation enhancements. **This plan recommends the following requirements:**

- (a) sidewalks on both sides of all local streets within the overall subdivision or project;**
- (b) variation in street pavement texture or markings to delineate pedestrian cross-walks;**
- (c) the provision of transit stops, bike racks, benches, shelters or other features to facilitate the convenience of pedestrian or alternative means of transportation within the overall subdivision or project; and,**
- (d) include a sidewalk, walkway or pedestrian/bikeway system which functionally connects the various land use elements (single family, two family, multifamily, commercial or open space) of the overall subdivision or project. The above enhancements should not just be incentive-based, but should be a requirement.**

Section 3.03 TV Town Village District - This section promotes the development of the original central village core of the Town of Holly Springs. The development standards in this district are designed to encourage a pedestrian oriented design throughout the district and maintain an appropriate pedestrian scale.

Section 3.05 CB Community Business District - These districts are established to provide a location for high volume and high intensity commercial uses and shall be coordinated to facilitate



Figure 4(i):  
*An example of an alternative pedestrian / bike path in Greensboro, NC.*

vehicular and pedestrian access from nearby residential districts.

#### Section 3.08 Architectural and Site Design Requirements

- These requirements are intended to create and reinforce a positive, recognizable identity for the Town of Holly Springs by promoting the use of techniques to: create variation and interest in the built environment and allow for the development of functional, yet human scale office establishments. Part B.7, Open Space, encourages pedestrian friendly shopping facilities and human scale office, retail and other business establishments, regardless of the size of the project. It states that,

“All integrated centers located in the LB, CB or GB districts shall include open space site design features such as plazas, courtyards, or other public gathering spaces, in an amount not less than the greater of two-hundred (200) square feet or two (2) percent of the gross floor area of the primary building of the integrated center.” (UDO, Section 3.08, B.7)

In A.1.B Determination of Facade Orientation, **applicable buildings should be required to make the building front ‘permeable’** (i.e., no blank walls). If the goal is “create variation and interest” and to have “pedestrian friendly shopping” on a “human scale”, then patrons on foot need to be able to see in and out and enter the stores easily. Front doors should be visible from and directly face the sidewalk. Making the building open to the sidewalk is a common denominator of a pedestrian friendly environment.

Also in A.1.B, **applicable buildings should be required to build to the sidewalk** (i.e., property line). Also, **parking lots should be prohibited in front of buildings** applicable to standards in this section. These are crucial steps in creating pedestrian oriented areas. If these rules cannot be applied broadly, then they should, at a minimum, be applied to special area districts like the Village District and the Gateway District.

Section 5 Planned Unit Development District - This district is designed to encourage the master planning of development for larger tracts of land and to coordinate such development so as to, among other things, encourage creativity and innovation in the design of developments, including the layout of land uses and open space that promote high standards in design and

construction, and further the purposes of the Comprehensive Plan. Subsection 5.03, part B, 'Filing Petition for Zoning Map Change and PUD Master Plan', states that the Planning Board shall be guided by the extent to which the proposal provides for the development of common open space and recreational areas (passive or active) accessible to the residents or users of the PUD by way of sidewalks, footpaths, walkways or bikeways. In the same subsection, the Planning Board should also be guided by, **"12 - Extent to which the development proposed provides pedestrian connectivity to abutting and/or adjacent commercial, business, residential, and mixed-use areas"**.

Section 7.01 Landscaping Regulations - Landscaping is an essential element of the site design process and is an important feature in promoting the public health, safety, comfort, convenience and general welfare of the Town of Holly Springs and its extra-territorial jurisdiction. This section promotes, among other things, the creation of landscape islands within vehicular areas to enhance pedestrian safety.

Section 7.06 Lot Design and Public Place Reservation- This section establishes guidelines for, among other things, the dedication or reservation of recreation areas to serve the needs of the owners or residents of a project or subdivision; adequate provision of parks, schools and playgrounds. In part C, 'Greenways', the ordinance states that,

"In any case in which a greenway is indicated on an adopted plan of the Town of Holly Springs as being located on lands proposed for development, such greenway shall be dedicated and developed." (UDO, Section 7.06, C)

Section 7.06 F, Recreational Facilities and Open Space, states that in order to provide park, recreation, open space or greenway sites to serve the future residents of the Town of Holly Springs and its extraterritorial jurisdiction, in conformance with any adopted plans of the Town of Holly Springs, every residential subdivision shall, at the time of final plat, include:

- a. the dedication of a portion of such land, as set forth in this Section, below;
- b. an equitable amount of land in another location; or,

c. pay to the Town of Holly Springs a fee-in-lieu of dedication  
(UDO, Section 7.06, F)

Section 7.07 Street Design and Right-of-Way Reservation- This section establishes guidelines for sidewalk location, and should be revised to **require sidewalks on both sides of all collector, subcollector, and local streets** (with the exception of short cul-de-sacs, dead-end streets, and roadways in areas with development less than one dwelling unit per 6 acres). Section 7.07 should also state that, “**Sidewalks should have a minimum width of five feet**”. This will provide better pedestrian accommodation than the current requirements to be on both sides of the roadway except on residential collector streets and local streets in residential areas (where only one side is currently required).

Section 7.07 C 2, ‘Walkway or Pedestrian / Bike Path Alternative’, states the following,

“Under appropriate circumstances or when approved for use as part of a development plan approval, an alternative walkway or pedestrian / bike path may be proposed in addition to sidewalks. Walkways or pedestrian / bike paths shall be a minimum of eight (8) feet in width to a maximum of eighteen (18) feet in width and may be located in easements reserved for such use outside of the street right-of-way” (UDO, Section 7.07, C, 2). **Minimum width for a pedestrian / bike path should be ten (10) feet** to allow for safe shared use between bicyclists and pedestrians.

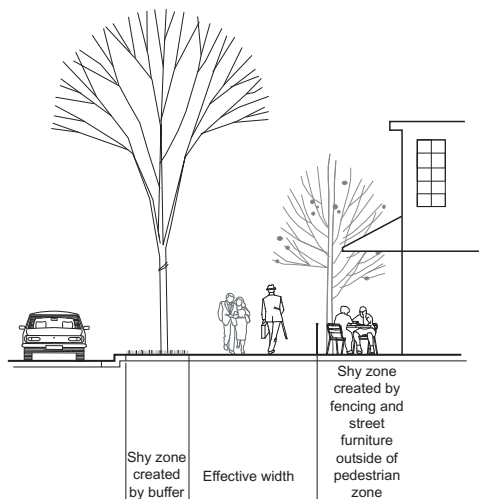


Figure 4(j):

*Shown here a typical cross section of a pedestrian friendly environment. Note the effective width of the sidewalk after street furniture and plantings are included.*

Section 7.07 C 3, ‘Sidewalk, Walkway and Pedestrian / Bike Path Standards’ discusses material standards, and part C 4., ‘Pedestrian Access Easements’, states that,

“In order to facilitate pedestrian access from streets to schools, parks, playgrounds, or other nearby streets, a perpetual, unobstructed pedestrian access easement, at least twenty (20) feet in width, may be required. Such pedestrian access easements shall be provided: on the final plat; or, by separate grant of easement subject to the approval, by resolution, of the Board of Commissioners.” (UDO, Section 7.07, C, 4).



**Pedestrian Access Easements should be highly encouraged and actively sought by the Town Council** as they allow not only safe routes to school, but also safe routes to parks and playgrounds, which are frequently used by children.

Section 7.08, Utility Design and Reservation – These requirements are intended to provide for orderly growth by establishing guidelines for: the coordination of the extension of new public facilities with existing public facilities; the dedication or reservation of rights-of-way or easements for utility purposes; and, adequate provision of water and sanitary sewer services. The section states that:

“Easements shall also be provided for: flood plains; wetlands; conservation areas; buffer areas; and, other areas of special designation or development restriction related to a specific geographic area” (UDO, Section 7.08, B.1.a).

**‘Greenways’ should be added to this section as part of the required public infrastructure listed above.** Greenways are public infrastructure that provide important functions to protect public health safety and welfare. Within flood prone landscapes, greenways offer the highest and best use of floodplain land, mitigate the impacts from frequent flooding and offer public utility agencies access to floodplains for inspection, monitoring and management. Greenways filter pollutants from stormwater and provide an essential habitat for native vegetation that serves to cleanse water of sediment. Greenway trails provide viable routes of travel for cyclists and pedestrians and serve as alternative transportation corridors for urban and suburban commuters. Greenways serve the health and wellness needs of our community, providing close-to-home and close-to-work access to quality outdoor environments where residents can participate in doctor prescribed or self-initiated health and wellness programs. All of these functions make greenways a vital part of community infrastructure.

Section 7.09 Pedestrian Circulation and Vehicular Area Design – These regulations are designed to promote high visual aesthetics

and functional pedestrian access in and around developments. This intent is accomplished by the connectivity of walkways and pedestrian/bikeway systems in and around a development with the general sidewalk system and greenway system. The development of private walkways or pedestrian/bikeway systems is required for all new developments and additions to existing developments. This section is provided, in its entirety as part of the Appendix. In part A.1 of Section 7.09, the following item should be added: **“G. Provide adequate pedestrian facilities across roadways to adjacent subdivisions (e.g., crosswalks, signage, pedestrian refuge islands, curb ramps)”**. This will help to ensure that pedestrians in subdivisions are not divided and separated by roadways that lack safe opportunities to cross.

Section 7.10 Open Space Regulations - While open space may vary widely in terms of type, size, use and location, is a critical element in determining the quality of the built environment. Since open space dedication affects greenway development, this section is also provided, in its entirety as part of the Appendix. In part C, Dedication and Maintenance of Open Space, the following note should be added, **“As stated in UDO Section 7.06, Part C, in any case in which a greenway is indicated on an adopted plan of the Town of Holly Springs as being located on lands proposed for development, such greenway shall be dedicated and developed.”** Adding this note to section 7.10 reinforces its intent to provide a high quality built environment.

#### **Northeast Gateway Area Plan: Sunset Lake Road/Holly Springs Road**

Pedestrian-related policy recommendations identified by the Northeast Gateway Area Plan include:

- “Provide a pedestrian friendly environment. A pedestrian friendly environment shall be accomplished by the use of safe crosswalk access from streets to store fronts including sidewalks on both sides of Holly Springs Road and Sunset Lake Road and with interior sidewalk connections through commercial developments. Greenways shall also be constructed to provide a natural connection between the residential subdivisions and the commercial centers in accordance with the Northeast Gateway Plan Land



Use Plan.” (Northeast Gateway Area Plan, Plan Policies Section)

- “Place parking to the rear and sides of buildings and bring buildings closer to the roadway. Parking shall be placed to the rear and sides of buildings to create a pedestrian friendly environment and create the visual continuity of buildings facades along the streets rather than the ‘sea of parking’ that is common in older commercial developments.” (Northeast Gateway Area Plan, Plan Policies Section)
- “Mix of Uses –Office, Retail, Single Family, Multi-Family Residential. Throughout the study area and mainly through the intersection of Holly Springs Road and Sunset Lake Road developments should include a mix of uses to ensure that the area is viable and sustainable. Having a mix of land uses encourages pedestrians and various activities in close proximity and reduces the need for vehicle trips on the Town’s roadways.” (Northeast Gateway Area Plan, Plan Policies Section)
- “Provide interconnectivity through the use of shared driveways and limited curb cuts. This policy will help ensure that access points along the thoroughfares will be minimized to ensure a safe and efficient traffic pattern and to reduce potential traffic disruptions.” (Northeast Gateway Area Plan, Plan Policies Section)
- “Work with NCDOT to secure pedestrian underpasses on I-540 and Holly Springs Road.” (Northeast Gateway Area Plan, Implementation Section)

### Town of Holly Springs Open Space Master Plan

Potential trail initiatives identified by the Open Space Master Plan include:

Section 2.11, Greenway Trails, identifies 3.2 miles of existing trails, 46.6 miles of “Proposed Greenway Trails on Current Maps” and 73 miles of “Identified Links & trails from Open Space Study”. (Open Space Plan, p.40)



*Figure 4(k):  
Street trees create a sense of enclosure and guide a pedestrian with a pleasing steady pattern.*

Section 2.12, Utility Corridors, identifies easements located throughout the entire Holly Springs vicinity and could provide large linear tracts of land to be utilized for open space and greater pedestrian connectivity. The following easements are identified in the Holly Springs Open Space Master Plan, p. 43:

CP&L Power Line Easements

25.0 Miles

Colonial Pipeline Gas Easement (Within Study Area)

4.30 Miles

Water Line Easements

22.1 Miles

Sewer Line Easements

21.2 Miles

Section 3.2.1, Identified Trail Connections, lists five potential trail corridors that would provide greater open space impact to areas on the verge of significant developmental growth.

Where possible, the 'Identified Trail Connections' were incorporated into the development of the greenway recommendations found within this Pedestrian Transportation Plan. **Town of Holly Springs' Parks and Recreation staff should negotiate opportunities for trail alignment within the utility corridors identified in Section 2.12 of the Open Space Master Plan, as well as within corridors of PSNC and Progress Energy.**

### Ten-Year Comprehensive Growth Plan

The August 2005 statistical update contains policies related to pedestrian planning:

In the land use section, the creation of pedestrian-oriented developments is encouraged. The Town shall also ensure residential neighborhoods provide interconnectivity of roads and pedestrian pathways.

In the parks and recreation section, policies encourage that parks be located within a reasonable walk from each neighborhood within the study area. The Town shall develop a greenway system connecting parks and other points of interest, which will also link up with other municipal and county systems.

The housing section encourages mixed-use developments and encourages that they be interconnected and designed with pedestrian activity and interaction in mind.

The transportation section refers to an adopted Sidewalk Capital Improvement Plan that establishes a priority of needed sidewalk connections, which will provide input for the recommended facilities within this plan. The policies of the transportation section cite that subdivisions shall be designed to create a safe pedestrian environment and encourage pedestrian traffic. The Town shall also encourage all new roads to be built to accommodate and encourage pedestrian and bicycle activity. The environment section encourages multi-modal travel and interconnected streets. It also suggests a tree preservation ordinance that could be designed to require street trees within pedestrian corridors.

Suggested modifications to the ten-year comprehensive growth plan include the following:

- In the Public Safety section, a **policy should be included to promote pedestrian safety**, advocating for the programs that are outlined in the first half of this chapter.
- In the transportation section, the objective should be changed to **“provide a safe and efficient multi-modal transportation system”**; or “transportation” could simply be defined elsewhere in the document to include alternative modes of transportation.
- In the Public Utilities section, a policy could be added to **encourage utility corridor development practices that allow for maximum compatibility with pedestrian and bikeway corridors**. Land purchased for the purpose of providing utilities (such as water and sewer) can serve a greater community benefit if developed to accommodate a multi-use trail. Also, utilities should be defined in this section to include ‘Greenways’ as infrastructure (see page 16, Chapter 4)